

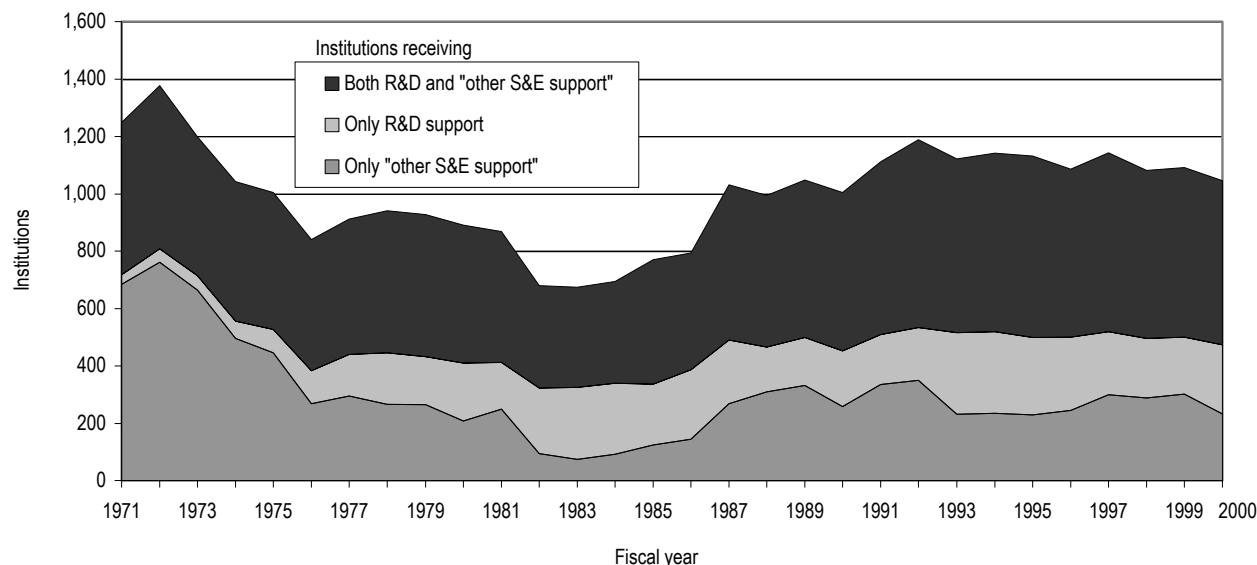
NUMBER OF ACADEMIC INSTITUTIONS RECEIVING FEDERAL S&E SUPPORT

When the 1994 Carnegie Classification was completed, there were approximately 3,400 accredited degree-granting institutions of higher education in the United States.⁵ (See the Sidebar below, *1994 Carnegie Classification of Academic Institutions*, for definitions of the 1994 Carnegie Classifications.) Many of these never received Federal S&E support, and among those that did, many received it infrequently. The Federal Government provided S&E support to 1,248 academic institutions in FY 1971 and to 1,046 institutions in FY 2000. The intervening period was characterized by considerable fluctuation in the number of institutions receiving Federal S&E funds. (See figure 1 and appendix table 1.) After reaching its peak for the entire period in FY 1972 (1,378), the number of recipient institutions declined, reaching a low of 674 in FY 1983, less than half the number at its peak. After FY 1983, the number of institutions receiving Federal support increased, reaching a high of

1,188 in FY 1992 and fluctuating between approximately 1,050 and 1,150 thereafter.

These overall trends mask key differences in the number of academic institutions receiving Federal R&D support, as opposed to those receiving “other S&E support.” The number of institutions receiving only R&D dollars increased from a low of 33 in FY 1971 to 251 in FY 1983 and then fluctuated between 157 and 284 during the rest of the period. In contrast, the number receiving only “other S&E support” declined from a high of 761 in FY 1972 to a low of 74 in FY 1983, then increased to 332 in FY 1989, and fluctuated between 230 and 349 thereafter. The number of institutions receiving Federal support for both broad types of activities declined less dramatically—from a high of 569 in FY 1972 to a low of 349 in FY 1983—before beginning a trend characterized by a general increase to 654 in FY 1992 followed by fluctuations between 572 and 632. (See figure 1.)

Figure 1. Number of academic institutions receiving Federal S&E support, by type of support: FY 1971–2000



NOTE: S&E support includes R&D support (both R&D and R&D plant) and "other S&E support" (facilities and equipment for S&E instruction; fellowships, traineeships, and training grants; general support for S&E; and other S&E activities).

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, as reported in WebCASPAR data system (available at <<http://www.nsf.gov/sbe/srs/stats.htm>>).

⁵ This count does not include a number of private for-profit institutions and unaccredited institutions offering training in specialized areas such as cosmetology, air conditioning maintenance, and the like.

1994 Carnegie Classification of Academic Institutions

R1—Research universities 1 (89) offer a full range of baccalaureate programs, are committed to graduate education through the doctorate level, award 50 or more doctoral degrees, and receive \$40 million or more in Federal research support annually.

R2—Research universities 2 (37) are the same as research universities 1, except that they receive between \$15.5 million and \$40 million in Federal research support annually.

D1—Doctorate-granting institutions 1 (52) offer a full range of baccalaureate programs, are committed to graduate education through the doctoral degree, and award 40 or more doctoral degrees annually in at least five academic disciplines.

D2—Doctorate-granting institutions 2 (55) award 20 or more doctoral degrees annually in at least one discipline or 10 or more doctoral degrees in three disciplines.

MED—Medical institutions (57) are freestanding medical schools.

C1—Master's or comprehensive universities and colleges 1 (438) offer baccalaureate programs and, with few exceptions, graduate education through master's degrees. More than 50 percent of their bachelor's degrees are awarded in two or more occupational or professional disciplines, such as engineering and business administration. All of the institutions in this group enroll at least 2,500 students.

C2—Master's or comprehensive universities and colleges 2 (91) enroll between 1,500 and 2,500 students.

LA1—Baccalaureate or liberal arts colleges 1 (162) are highly selective, primarily undergraduate colleges that award more than 40 percent of their bachelor's degrees in the liberal arts and science fields.

LA2—Baccalaureate or liberal arts colleges 2 (450) award fewer than 40 percent of their degrees in the liberal arts and science fields and are less restrictive in admissions than baccalaureate colleges 1.

2-year—Associate of arts colleges (approximately 1,500) offer certificate or degree programs through the associate degree level and, with few exceptions, offer no bachelor's degrees.

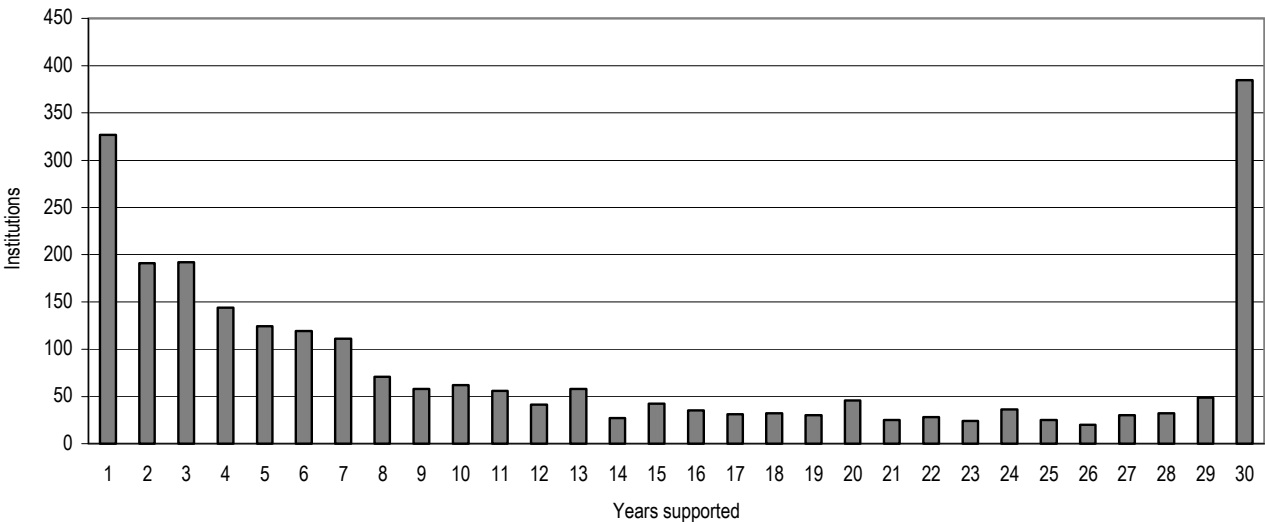
Other—Professional schools and other specialized institutions (approximately 700) offer degrees ranging from bachelor's to doctoral. At least 50 percent of the degrees awarded by these institutions are in single specialized fields. Institutions include theological seminaries, Bible colleges, and other institutions offering degrees in religion; health profession schools; law schools; engineering and technology schools; business and management schools; art, music, and design schools; teachers' colleges; and corporate-sponsored institutions.

Between 1971 and 1983, there was a substantial increase in the percentage of institutions receiving Federal R&D support. At the beginning of the 1970s, only 45 percent of the institutions receiving Federal S&E support received funds for R&D. By FY 1983, almost 90 percent of the supported institutions received R&D funds, although this percentage decreased thereafter. During the 1990s, 70 to 80 percent of supported institutions received R&D funds. (See appendix table 2.)

In summary, a shift in Federal support of S&E activities at academic institutions occurred over the past three decades. Fewer institutions are being supported overall, and greater emphasis is being placed on R&D funding, either alone or in concert with broader S&E funding.

The data also indicate that Federal support was episodic for many academic institutions. During the 30-year period between FY 1971 and FY 2000, an aggregate of more than 2,400 academic institutions received some form of Federal S&E support. However, most of these institutions did not receive support continually throughout the period. (See figure 2 and appendix table 3.) Most received support in less than half of the period (depending on the type of support being considered), and 40 to 50 percent were supported in 5 years or less. (See figure 3.) Only 21 to 27 percent of institutions receiving Federal support received it in more than 20 of the 30 years in the period. The extent of the continuity of support for an institution was often related to its Carnegie Classification, as the next section shows.

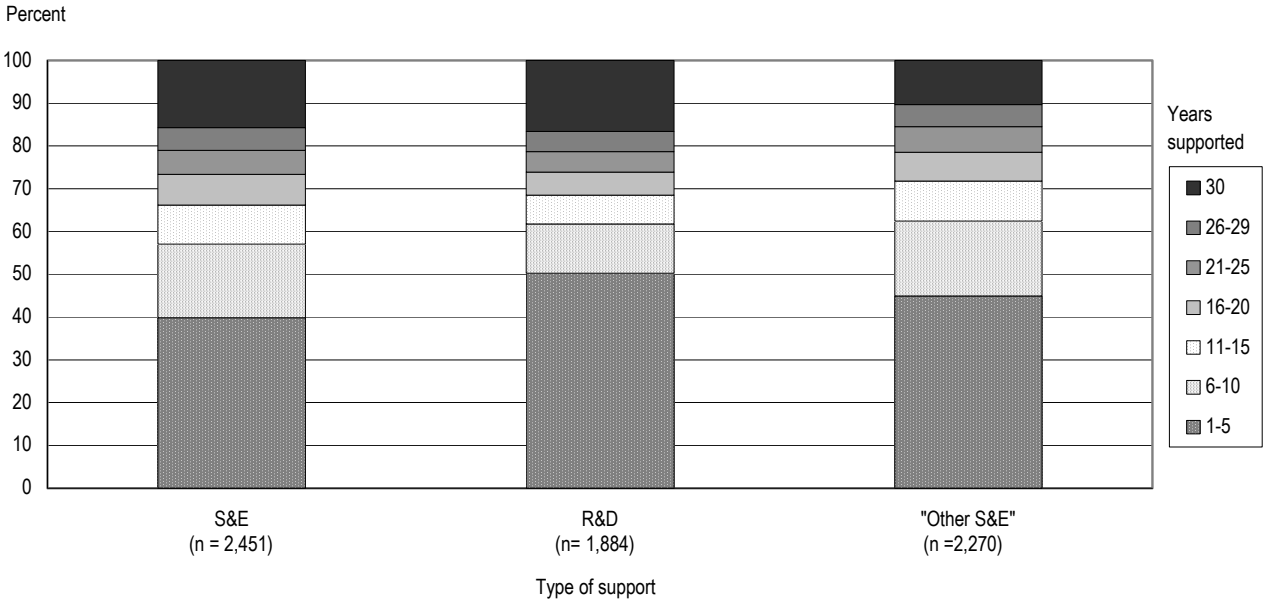
Figure 2. Distribution of the 2,451 academic institutions receiving any Federal S&E support in FY 1971 to 2000, by number of years supported during the period



NOTE: S&E support includes R&D support (both R&D and R&D plant) and "other S&E support" (facilities and equipment for S&E instruction; fellowships, traineeships, and training grants; general support for S&E; and other S&E activities).

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions, as reported in WebCASPAR data system (available at <<http://www.nsf.gov/sbe/srs/stats.htm>>).

Figure 3. Distribution of academic institutions receiving Federal S&E support in FY 1971 to 2000, by number of years supported during the period, by type of support



NOTE: S&E support includes R&D support (both R&D and R&D plant) and "other S&E support" (facilities and equipment for S&E instruction; fellowships, traineeships, and training grants; general support for S&E; and other S&E activities).

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